

NPL Site Narrative for Hanford 100-Area (USDOE)

HANFORD 100-AREA (USDOE) Benton County, Washington

Conditions at proposal (June 24, 1988): The Hanford 100-Area is adjacent to the Columbia River in the northern section of the 570-square-mile Hanford Site in Benton County, Washington. Since 1943, Hanford has been the scene of Federal nuclear activities, primarily production of nuclear materials for national defense.

The U.S. Department of Energy (USDOE) has nine nuclear reactors in the 100-Area. Eight reactors were in use during the 1940s and 1950s; the ninth, the N-Reactor, has been used since the early 1960s to produce plutonium and electricity. Over 110 waste disposal locations have been identified in the 100-Area. The disposal locations and plumes of contaminated ground water cover approximately 11 square miles.

An estimated 4.3 billion cubic yards of solid and dilute liquid waste comprised of radioactive, mixed, and hazardous constituents were disposed in cribs, trenches, and burial grounds in the 100-Area. USDOE has detected hexavalent chromium and strontium-90 in ground water beneath the area; ground water is not used within 3 miles of the 100-Area, but it is known to seep into the Columbia River in the 100-Area. USDOE detected strontium-90 in the Columbia River at levels significantly above background. Intakes on the Columbia River within 3 miles of the 100-Area supply drinking water to over 3,000 workers in the 100- and 200-Areas.

EPA, USDOE, and the Washington Department of Ecology (WDOE) are jointly developing an action plan that will include the work needed to address this area under the Superfund program, as well as other work needed to meet permitting, corrective action, and compliance requirements of Subtitle C of the Resource Conservation and Recovery Act.

Status (October 4, 1989): On May 15, 1989, EPA, USDOE, and WDOE signed a comprehensive agreement for the cleanup of the entire Hanford Site, including the area covered in this NPL site. This Federal Facility Agreement and State Consent Order contains schedules for remedial investigations and feasibility studies for Superfund work at the Hanford Site.

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be found on the Internet at [ATSDR - ToxFAQs](http://www.atsdr.cdc.gov/toxfaqs/index.asp) (<http://www.atsdr.cdc.gov/toxfaqs/index.asp>) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.